

REMARKS

Claims 1, 3-11 and 14-47 are pending in the application. Claims 1, 4-7, 29-33 and 38-46 are currently amended. Support for the amendments is found, for example, at Page 9, Paragraph 1 to Page 13, Paragraph 1 and Figures 1A-4B of the specification. No new matter has been introduced by the amendments.

In the Office Action dated February 13, 2009, the Examiner has rejected Claims 1, 4-9, 14, 15, 29-33, and 38-43 under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 3,713,441 to Thomas (hereinafter “Thomas”) in view of U.S. Patent No. 6,743,243 to Roy et al., (hereafter “Roy”) and further in view of U.S. Patent No. 6,726,923 to Iyer, et al. (hereafter “Iyer”).

Applicants respectfully submit that the rejection is overcome in light of the amendments made to the claims and the following remarks.

Claim 1 recites a device for creating an anastomosis between first and second anatomical vessels. The device includes, *inter alia*, a substantially cylindrical body at least partially formed by a resorbable sponge material, a first securing means for securing an end of the first anatomical vessel to the body, and a second securing means for securing a portion of the second anatomical vessel to the body. The body includes an inner surface defining a through opening configured to receive at least a portion of the first anatomical vessel. The body further includes a proximal flat surface configured to appose an outer surface of the second anatomical vessel and a distal surface distanced from the outer surface of the second anatomical vessel. Specifically, the body further includes a straight side surface, connecting the proximal surface and the distal surface, thereby providing a uniform outer diameter of the body. The through opening extends from the proximal surface to the distal surface. The first securing means is

adapted to adhesively secure at least an end of the first anatomical vessel to the through opening. The second securing means is adapted to secure the outer surface of the second anatomical vessel to the proximal surface of the cylindrical body, such that a hole formed in the outer surface of the second anatomical vessel is in fluid communication with the end of the first anatomical vessel.

Claim 29 recites a method for creating an anastomosis between first and second anatomical vessels. The method includes, *inter alia*, handling a substantially cylindrical body at least partially fabricated from a resorbable sponge material. The body includes an inner surface defining a through opening configured to receive at least a portion of the first anatomical vessel. The body further includes a proximal flat surface configured to appose an outer surface of the second anatomical vessel, a distal surface distanced from the outer surface of the second anatomical vessel, and a straight side surface connecting the proximal surface and the distal surface, thereby providing a uniform outer diameter of the cylindrical body. The through opening extends from the proximal surface to the distal surface of the cylindrical body. The method further includes adhesively attaching a portion of the first anatomical vessel to the inner surface of the cylindrical body, attaching the portion of the second anatomical vessel to said proximal surface of the cylindrical body, and creating an anastomosis between the first and second anatomical vessels and through the through opening in the body.

The device and method contemplated by the claimed invention is capable of conveniently creating an anastomosis between two anatomical vessels, with the two vessels reliably attached to the cylindrical body of the device and fixed in position relative to each other. Specifically, in operation, when both vessels are attached to the cylindrical body, the structural support provided by the cylindrical body prevents the first vessel from swinging or moving

relative to the second vessel, which is preferred in a cardiac surgical procedure, such as a coronary artery bypass surgery.

Thomas is directed to a method of using an artery-vein shunt for hemodialysis. The shunt provides a blood channel between a blood vessel (24) and an elastomeric tube (21). The shunt includes a graft material (23) and an infection barrier wrap (22) continuous to the graft material. Specifically, as illustrated in Figures 1-3 of Thomas, the graft material, sutured to the vessel (24), is in the shape of a ring. The infection barrier wrap is in the shape of a sleeve extending from the graft ring.

The Examiner has relied on the combination of the infection barrier wrap and the graft material for the alleged teaching of the cylindrical body recited in Claims 1 and 29 (*see*, Page 3, Lines 9-11 of the final Action and Page 2, Paragraph 1 of the Advisory Action).

However, the alleged teaching of Thomas fails to teach or fairly suggest the cylindrical body as recited in Claims 1 and 29 for the following reasons.

First, the graft material of Thomas fails to disclose a flat proximal surface for apposing an outer surface of the second vessel, as recited in Claims 1 and 29. In this regard, Thomas teaches a ring-shaped graft material, as viewed from Figures 1-3 of Thomas, for the convenience of being sutured onto the blood vessel (24). In other words, Thomas does not disclose, either explicitly or inherently, a flat proximal surface for apposing an outer surface of the second vessel, not to mention the securing means associated with the flat proximal surface.

Moreover, the combination of the graft ring and the sleeve fails to disclose a cylindrical body having a uniform diameter, defined by a flat proximal surface, a distal surface and a straight side surface connecting the proximal surface and the distal surface. Specifically, Thomas discloses that the sleeve has a much smaller diameter than that of the graft ring. Thus,

the alleged teaching of Thomas fails to disclose a cylindrical body having a uniform diameter. Furthermore, the hypothetically combined side surfaces of the wrap ring and the sleeve does not disclose a straight side surface connecting the proximal surface and the distal surface of the body.

As a matter of fact, the Thomas arrangement is for the purpose of readily moving the elastomeric tube (21) relative to the blood vessel (24), so as to provide a certain budget for adjusting the position of the tube relative to that of the blood vessel. Accordingly, the combination of the wrap ring and the sleeve does not provide the advantages offered by the claimed invention, i.e., creating an anastomosis with solid structural support of the cylindrical body and at the same time fixing the first vessel relative to the second vessel.

Hence, the recitation of Claims 1 and 29 are distinguished from Thomas.

Roy is relied on for the alleged teaching of a securing means for attaching a tubular member to a vessel. Iyer is relied on for the alleged teaching of a resorbable sponge. However, neither Roy nor Iyer remedy the underlying deficiencies of Thomas with respect to Claims 1 and 29, i.e., neither Roy nor Iyer teach or fairly suggest the cylindrical body as recited in Claims 1 and 29.

Thus, none of Thomas, Roy and Iyer, taken alone or in combination, teach or suggest the combination of features recited in Claims 1 and 29, from which all the other claims ultimately depend.

Accordingly, the rejection of Claims 1, 4-9, 14, 15, 29-33, ad 38-43 under 35 U.S.C. §103(a) based on the hypothetical combination of Thomas, Roy and Iyer is overcome, and withdrawal thereof is respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'F. S. DiGiglio', with a stylized, cursive script.

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